## Remarks

At this issuance of the present office action, claims 1, 2, 7, 8, 9, 11, 12, 15, 17, 18, 19 and 21 are pending with all other claims either having been canceled or withdrawn. As of this response, claims 3-6, 10, 13, 14, 16, 20 and 22-33 have been canceled without prejudice.

### *Claim Rejections – 35 USC §101*

The Office has rejected claims 1, 2, 7-9 and 21 under 35 U.S.C. 1010 alleging that the claimed invention is directed to non-statutory subject matter. The Office bases this rejection on a single statement in the specification in which one exemplary embodiment of the predictive server and the client server are described as a software application. The Office concludes that these elements are then merely software, not tangibly embodied on a computer readable medium and drawn to a practical application. The applicants disagree with the Offices position.

First of all, the actual reference in the specification clearly states that the predictive server may be a software application residing on or running on computer. Thus, the clearly establishes that the applications are tangibly embodied on a computer readable medium. The rejected claims are system claims, not method claims and as such, the claims are focusing on elements of a system. The predictive server and the client agent are components to the system, whether they are software applications running on a computer, or hardware switches being triggered is not relevant in this context. If these elements existed in a method claim, the applicants would respond to the Office's rejection by stating that the elements reside on - computer readable medium. However, in the case of a system claim, it is clear that the predictive server and the client agent are in deed physical elements in a system either residing on a separate computer or being applications running on shared servers. As such, the applicants respectfully submit that the Office's rejection is not appropriate and respectfully request the Office to remove this rejection. Thus, claims 1, 2, 7-9 and 21 satisfy requirements under 35 U.S.C. 101 and are in condition for allowance.

### *Claim Rejections – 35 USC §112 (first paragraph)*

The Office has rejected claims 1, 2, 7-9 and 21 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. More specifically, the Office indicates that claim 1 includes the limitations of "forwarding the stored first response and the

received predictive responses to the client agent" and "stored first response" which do not appear to be supported by the applicant's specification.

In response to this rejection, the applicants have amended claim 1 to remove the term "stored" from the two limitations highlighted by the Office. However, the applicant respectfully submits that the amendment is being made solely for the purpose of resolving antecedent issues rather than overcoming a lack of support in the specification. The applicant points out that items received by a server, such as the predictive server, are inherently stored in some manner, whether in a buffer, a stack, a queue, a memory element, memory register or the like. As such, it inherent that the first response is indeed a stored response. However, the applicants have deleted the word stored from the claims to resolve the antecedent issues. Thus, the applicants respectfully submit that claims 1, 2, 7-9 and 21 as presently presented, are in condition for allowance and meet the requirements under the first paragraph of 35 U.S.C. 112.

***Claim Rejections – 35 USC §112 (second paragraph)***

The Office has rejected claims 1, 2, 7-9, 11, 12, 15, 17-19 and 21 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particular point out and distinctly claim the subject matter which the applicant regards as the invention.

More specifically, the Office has stated that the claim 1 limitation "said stored response" in claim 1 lacks a proper antecedent basis. Claim 1 has been amended to overcome this informality.

The Office has indicated that the claim 1 limitations "with the predictive server analyzer unit" and "with the agent analyzer unit" are indefinite because it is not clear what these terms mean and therefore, they render the claim vague and indefinite. Although the applicants are somewhat confused as to the reason for this rejection, nonetheless the applicants have attempted to address this rejection. The "predictive server analyzer unit" has been amended to recite the "server analyzer unit of the predictive server" to be more clear as to the recited element. Further, the term "agent analyzer unit" has been amended to recite "agent analyzer unit of the client agent". If the Office's objects is actually to the terms server analyzer unit and agent analyzer unit, these terms are presented in the figures and the specification and elements 210 and 110 respectively. Further, at several locations in the specification, the operations of analyzing and receiving items by the analyzer of the predictive server and/or the client agent are described. As

such, the applicants assert that at a minimum, the claims as amended are fully compliant with the second paragraph of 35 U.S.C. 112.

The Office has indicated that the term "and" in the last line of claim 1 renders the claim indefinite. Claim 1 has been amended to remove this informality.

With regards to claim 11, the Office has indicated that the limitations "the server's first response" and "the first response" lack proper antecedent basis. Claim 11 has been amended to overcome this rejection. Further, the Office has indicated that the limitation "the request" in the last phrase of claim 16 is indefinite. Claim 11 has been amended to more precisely indicate what "the request" is and thus to overcome this rejection. The Office has also indicated that the limitation "with the predictive server" is indefinite because is it not clear what this term means and therefore, renders the claim vague. Claim 11 has been amended to over come this rejection. More specifically, claim 11 recites a predictive server which is clearly defined in the specification. Finally, an informality in claim 11 has been cleared up by deleting the word "and" from the end of the claim.

***Claim Rejections – 35 USC §102***

The Office has rejected claims 1, 2, 7-8, 11, 12, 15, 17-18 and 21 under 35 U.S.C. 102(e) as being anticipated by United States Patent Number 7,047,485 awarded to Klein et al.

**General differences between invention and Klein**

Before getting into the details, the applicants wish to point out at a higher level, that the references cited by the Office are not on point with the claimed invention. The general emphasis of the claimed invention is to accelerate the delivery of a "requested web page" as opposed to pre-caching items that may subsequently be requested by a user while the user is viewing a previously requested web page (which is the focus of Klein). Thus, the present invention is focused on obtaining the full content of a requested web page and pushing that to the requester in an accelerated fashion. The cited reference is focused on using the "idle time that occurs when the web browser is displaying a web page and that time that occur, when a new web page is requested" and using an intelligent engine to determine what web page will be requested next and pre-fetching and pre-caching this information. Klein column 3 lines 37-45.

This is fundamentally different from the claimed invention which, in a paraphrased form recites (1) requesting a web page, (2) generating a list of predictive requests that are needed for

presenting the requested web page, (3) requesting these items from the server and forwarding them to a client so that they are there and ready for rendering when the client attempts to render that portion of the requested web page.

It should be appreciated that this is quite different from what is described in Klein. Stated quite succinctly, the present invention operates to fetch items for a requested web page and make them locally available for a client to accelerate the rendering of the webpage by reducing the time that would normally be required for the client to request the various content items of the web page, receive them and then render them. The Klein reference analyzes a information pertaining to a currently rendered and displayed web page to predict what web pages will be visited next, and then pre-cache the predicted next web pages. These are two completely different technology solutions.

More specifically, the applicants which to make two clear distinctions between the claimed invention and Klein.

**(1) Klein discloses a system and a method for pre-caching web pages before they officially requested.** Throughout the Klein reference, this characteristic is relied upon. A few such passages are referenced below with appropriate highlights:

> "*An intelligent statistical technique is used to determine what the next web pages to be required are, and a technique is used to fetch these web pages from a web server, over the Internet, **before** they are officially requested. Hence, the needed pages are already in the web browser cache and available to the web browser immediately*. Col. 3 lines 39-45
>
> *One or more embodiments of the invention provide for a method for making Internet web browsers access web pages faster by pre-caching web pages and objects, locally at the web browser, **before** they are actually needed. Thus, avoiding delays placed upon that web browser by the Internet network, memory or CPU*. Col. 3 lines 46-51
>
> *One or more embodiments of the invention provide a method for intelligent pre-caching of web pages and their objects based on a statistical significance providing a statistical subset of objects to be available **before** actually needed. A statistical subset reduces the number of objects to be cached and reduces computer resource utilization as well as the utilization of the Internet.*" Col. 3 lines 52-58

Thus, Klein cannot describe, suggest or teach any of the elements in claim 1 since the elements of claim 1 refer to processing a first response to a requested web page.

**(2) Klein's system halts, or stops operating, when a client requests a web page**. The reason for stopping the operation of Klein's system is that operation described in Klein results in slowing down the fetching of a requested web page. This is clearly described in Klein by referring to the following passages:

> *"In one or more embodiments, to avoid not interfering with normal Web Browser 110 processing, as soon as a new web page is requested, the intelligent pre-caching process* ***is halted immediately*** *The immediacy is important so that the pre-caching process does not interfere with the performance of the new web page request and actually slow up that web page's accesses. Thus, terminating Web Browser 110 pre-caching thread should be done as soon as possible with thread termination programming controls"*

Thus, Kelien cannot describe, suggest or teach the elements of claim 1 because the claimed process **is initiated when** a client is requesting a web page and it is executed for accelerating the presentation of the current requested web page. Klein's teaching that the system **is halted immediately** upon requesting a new web page teaches away from the present invention and attempting to read Klein on the recited claim would totally destroy the Klein reference.

**Klein is not a valid 35 U.S.C. 102 reference**

At the onset, the applicants wish to point out that the Klein reference was not filed until November 2, 2000. The current application claims priority to United States Provisional Application 60/183,818 which was filed on February 22, 2000, United States Provisional Application 60/194,050 filed on April 3, 2000 and United States Provisional Application 60/196163 filed on April 11, 2000. Each of these dates beats the filing date for the Klein reference. The applicants do note that the Klein reference claims priority to United States Provisional Application 60/164,698 which was filed on November 10, 1999. However, the applicants have observed that there are substantial differences between Klein and the provisional

application for which it claims priority. As such, the applicants assert that reliance on Klein is not appropriate and that the Office, at most, can only rely on the content that was disclosed in United States Provisional Application 60/164,698 to which Klein claims priority.

**Specific Short-Comings of Klein**

The Office alleges that a "**predictive server** in association with said server wherein said predictive server comprises a server analyzer unit and a server storage unit" is described at column 6, lines 10-20 and Fig. 1 with regards to the Web Agent 116 running on the Web Sever 112. The applicants assert that reliance on Klein is not appropriate as the underlying provisional application does not include this section of text.

The Office alleges that "a **client agent** in association with the client wherein the client agent comprises an agent analyzer unit and an agent storage unit" is described at column 6 lines 64-67 and Fig. 1 with regards to Applet 124 running on client 104. The applicants assert that reliance on Klein is not appropriate as the underlying provisional application does not include this section of text.

However, the predictive server and the client agent recited in claim 1 are not described, suggested or taught either in Klein or the provisional application from which Klein claims priority. Looking further at the elements of the claims related to these to elements, the applicants' position and the allowability of the claims over Klein is clearly established.

**Klein does not describe, suggest or teach the Predictive Server**

(a) The first element that is associated with the predictive server of claim 1 recites "*receiving at the predictive server analyzer unit, a first response to a request for a web page from said server*". In contrast to the predictive server of claim 1, the web server 112 of Klein receives requests from **a client** for web pages and **not responses** from the server. This is quite evident by examining the passage in Klein that the Office relies on:

> *"Starting with an interaction at Web Browser 110 such as the click of a cursor control device 108 or mouse, <ENTER> key or other selected keyboard operation, a transaction is generated that will request a web page from Web Server 112 and possibly that of the Application Server 114 instead. The transaction is sent to Web Server 112 across network 102 which can be the Internet/Internet or any other private network). Once the transaction is at Web Server 112, a decision will be made by Web Server 112 to route the*

*transaction to Application Server 114 for additional service, or Web Server 112 may service this transaction locally*." Column 5 lines 28-38)

(b) The second element that is associated with the predictive server of claim 1 recites *"generating at the predictive server storage unit a predictive list of requests for objects, which are needed for presenting the requested web page, based on an analysis of information contained within said stored first response".*

The Office alleges that "generating at the predictive server storage unit a predictive list of requests for objects, which are needed for presenting the requested web page, based on an analysis of information contained within said stored first response" is described at column 6, lines 10-29. The applicant asserts that this reference is not relevant with regards to this claimed element. First of all, the cited passage in Klein is clearly focused on analyzing an already displayed web page and then retrieve from a web agent, statistical information that relates to which web page is most often accessed directly after the currently displayed web page. Further, the objects that are pre-cached are also obtained in a statistically ordered fashion. Also, all of this fetching is being conducted during idle time (while the user views the displayed page). The cited element generates *a predictive list of requests for objects, which are needed for presenting the requested web page, based on an analysis of information contained within said first response.* Thus, the predictive list of requests, the execution of those requests, and the rendering of the results there from all take place during the process of rendering the requested web page – not during idle time while the web page is displayed. As such, the applicants assert that this element of the claim is not described suggested or taught in Klein.

(c) The third and fourth elements that are associated with the predictive server of claim 1 recite *"issuing predictive requests to the server; receiving from the server predictive responses".*

The web agent 116 of Klein **does not issue predictive requests** to the server and **does not receive predictive responses**. The Offices has apparently confused the features of the applet 124 (supposedly equivalent to the client agent) with the features of the web agent 116

(supposedly equivalent to the predictive server). The cited passage relied on by the Office clearly refers to applet 124 and not to web agent 116:

> *"For each Web Object 128 in Object List 126, Java Applet 124 dispatches a program thread inside Web Browser 110, a thread that runs independent and does not interfere with any other Web Browser 110 normal activity. Java Applet 124, under this program thread, makes a request for that Web Object 128 over network 102. Web Server 112 services this request and delivers to Java Applet 124, over network path 102, the requested Web Object 128. Then Java Applet 124 copies Web Object 128 into Web Browser Cache 130 where it will reside and be made available to Web Browser 110 on subsequent Web Browser 110 transactions. Thus, Web Object 128 is made available before actually needed by Web Browser 110"* Column 6 lines 24-36

(d) The fifth and the last element that is associated with the predictive server of claim 1 recites "forwarding the first response and the received predictive responses to the client agent which, in turn, is capable of forwarding the first response and the received predictive responses to the client".

The web agent 116 in Klein **does not forward any responses**. Klein describes the web server 112 and not the web agent responses to predictive requests and sends the predictive responses.

"*Web Server 112 services this request and delivers to Java Applet 124, over network path 102, the requested Web Object 128. Then Java Applet 124 copies Web Object 128 into Web Browser Cache 130 where it will reside and be made available to Web Browser 110 on subsequent Web Browser 110 transactions. Thus, Web Object 128 is made available before actually needed by Web Browser 110*" Column 6 lines 28-36:

**Klein does not describe, suggest or teach the Client Agent**

Claim 1 recites that the client agent includes the following limitations:

"*wherein the client agent is capable of:*

*receiving with the agent analyzer unit of the client agent via the predictive server said first response,*

*analyzing the first response,*

*automatically forwarding said first response to the client,*

*receiving from the client a request for an object contained in first response and is needed for presenting the requested web page,*

*comparing the request for said object with the already received predicted responses, wherein*

*when an already received corresponding predicted response exists the existing predicted response is forwarded to the client.*

Klein does not describe, suggest or teach these limitations. More specifically, the Klein reference does not describe the element receiving the first response of the server to a client's **currently requested** web page. In contrast, Klein describes handling web objects that are most often accessed **after** the current requested web page is displayed. The distinctions made with relationship to the predictive server also apply here to the client agent. But, specifically looking at the passages relied upon by the Office in rejecting the client agent elements of claim 1:

"*Once Java Applet 124 initializes, a request is made by Java Applet 124 over network 102 to Web Agent 116 running under control of Web Server 112. The nature of the request is to retrieve from Web Agent 116, statistical information that relates to which web page is most often accessed directly after the current web page being viewed at this moment in Web Browser 110. In addition to the web page most likely to be accessed next, Web Agent 116 provides an Object List 126, to Java Applet 124 of Web Page Objects 128 that is ordered in statistical significance (high to low). Objects 128 can be graphics, applets or other web page content. Java Applet 124 retrieves Object List 126 over network 102 and begins its pre-caching logic upon it.*"

*For each Web Object 128 in Object List 126, Java Applet 124 dispatches a program thread inside Web Browser 110, a thread that runs independent and does not interfere*

*with any other Web Browser 110 normal activity. Java Applet 124, under this program thread, makes a request for that Web Object 128 over network 102*." Column 5 lines 28-38 and column 6 line 28 to column 7 line 37.

It is clear that Klein does not focus on dealing with the rending of a web page by fetching items for a currently requested web page and forwarding them to a client agent which will in turn provide them to the client when rendering the web page.

Thus, it will be appreciated that the elements relevant to the predictive server are not described, suggested or taught in Klein. The Office has attempted to overlay Klein on the present invention but it simply does not work. The main reason is as clearly described above, Klein is focused on an entirely different technology. And although some of the terms and operations sound similar, there is actually no equivalent between what is described in Klein and what is disclosed and recited by the claims of the present application.

Therefore, the applicants respectfully submit that claim 1 is allowable as presented herein. Further, the applicants assert that claim 11 is also allowable for the very same reasons that claim 1 is allowable. Furthermore, the dependent claims, claims 2, 7, 8, 9, 12, 15, 17, 18, 19 and 21 all depend either directly or indirectly from claim 1 or claim 11 and as such, are also in condition for allowance.

If the Office has any questions or if there are any actions that can be handled through an Examiner's Amendment, the applicant requests the Office to contact the attorney of record using the below-provided contact information.

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